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5.17 LIST OF RELATED PROJECTS AND SUMMARY OF CUMULATIVE IMPACTS

5.17.1 Introduction

The analysis of the potential cumulative effects related to the Project has been prepared pursuant to the Title 20 of the California Code of Regulations and the California Environmental Quality Act (California Code of Public Resources, Section 21000 et seq.) (CEQA). The relevant provisions of the State CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.) have been used for guidance in the preparation of this analysis. The State CEQA Guidelines state that the analysis of cumulative impacts should be "guided by the standards of practicality and reasonableness" (CCR §15130(b)). The analysis may be based on a list of past, present, and reasonably anticipated future projects producing related or cumulative impacts" (CCR §15130(b)(1)(A)). The *CEQA Guidelines* state that cumulative impacts be discussed when they are significant, and that the discussion of cumulative impacts reflects the severity of the impacts and their likelihood of occurrence. However, the *CEQA Guidelines* state that the discussion need not provide the impacts discussion in as great detail as provided for the project's impacts.

The SSU6 Project includes a geothermal power plant and ancillary facilities (e.g., transmission line, well pads, and associated pipelines). The ancillary facilities are primarily linear in nature. Where potentially significant impacts have been identified, an assessment of cumulative impacts is provided in the respective sections of this AFC. This Section 5.17 provides an overview of the study area and a description of the related projects considered in the analysis of cumulative impacts, as well as a summary of the analysis provided in the other sections of this document.

The analysis of project and cumulative impacts considers the relevant regional plans related to geothermal facilities. The Geothermal and Transmission Element was adopted by the Imperial County Board of Supervisors in 1977 but has been amended and updated; the last update occurred sometime after 1998. Consistent with state law, the Geothermal and Transmission Element has been incorporated into the County's General Plan (California Government Code, Section 65303). The purpose of the Geothermal and Transmission Element is to "provide a comprehensive document that contains the latest knowledge about the resources, workable development technology legal requirements, policy (county, state, and federal), and implementation measures."

Furthermore, the County regulates the use of land for geothermal purposes through zoning and local land use permits. The Land Use Ordinance includes the Geothermal Overlay Zone. A Conditional Use Permit (also sometimes known an a "geothermal permit") would normally be required for geothermal projects. In this case, no permit would be required because the CEC has exclusive permitting authority pursuant to the Warren Alquist Act. The specific standards applicable to geothermal projects are contained in Title 9, Division 17, Sections 91701 and 91702 of the County's Land Use Ordinance.

The AFC incorporates the Geothermal and Transmission Element and Title 9, Division 17, Sections 91701 and 91702 of the County's Land Use Ordinance by reference.

5.17.2 Identification of Related Projects

Relevant probable future projects are considered to be those in the same general geographic study area. For this cumulative assessment, the study area was initially defined as being within a 6-mile radius of the SSU6 Project, including the plant site, well pads, pipelines and transmission lines and associated linears. Projects or proposed projects of potential regional significance are also considered in the cumulative analysis. Information was gathered on projects that: 1) are greater than 30,000 square feet (0.7 acres); 2) have submitted an application for required approvals and permits; 3) have been previously approved and may be implemented in the near future; 4) are contemplated and reasonably anticipated, but have not been formally proposed; and 5) have potential overlap of construction and operation impacts with the project.

Information concerning potential future projects for the cumulative impact assessment was primarily obtained via personal communications. Information available via the Internet was also reviewed. Information was provided by Imperial County Planning Department, Imperial Irrigation District (IID), State Clearinghouse, California Department of Transportation (Caltrans), California Energy Commission (CEC), unincorporated community of Niland, and the cities of Calipatria, Brawley, and Westmorland.

The project vicinity, and greater Imperial County, is generally characterized by desert open space and agricultural uses, supported by small towns and other sparsely populated communities. Accordingly, the number, size, and scale of cumulative projects in the area are substantially less than in more-urbanized portions of California.

The analysis of the potential cumulative impacts of the SSU6 project and other projects considers the construction and operation impacts of the individual projects. The magnitude of cumulative impacts can be dependent, in part, on the extent of construction overlap in time and geographic area. For the purposes of this cumulative impact assessment, it is anticipated that the construction phase for the SSU6 project will be from the fourth quarter 2003 to the fourth quarter 2005.

The IID Water Conservation and Transfer Project and Draft Habitat Conservation Plan was the only project identified within the 6-mile cumulative impacts study area. The next nearest projects were the State Route (SR) 78/111 Brawley Bypass Project and the Salton Sea Solar Evaporation Pond Pilot Project, both about 10 to 12 miles away from the SSU6 Project (see Figure 5.17-1). The cumulative impacts study area was subsequently expanded to 12 miles to include these projects, providing a highly conservative cumulative impacts analysis.

Other projects under review within the study area do not meet the other cumulative impacts assessment criteria described above (i.e., they are too distant, too small, or not of regional significance).

5.17.3 Description of Cumulative Related Projects

Table 5.17-1 lists the three projects considered in this cumulative impact assessment and includes the time frames for construction of these projects. Figure 5.17-1 illustrates the general geographical locations of these projects (The Project ID numbers listed below correlate to those on Figure 5.17-1).

5.17.3.1 State Route 78/111 Expressway (Brawley Bypass) (Project ID 1)

Caltrans has proposed the State Route (SR) 78/111 Brawley Bypass Project, which would include a four-lane divided expressway from SR-86 north of the City of Brawley to 1.5 miles south of the eastern junction of SR-111 and SR-78 in Imperial County. The project would be located 12 to 15 miles from the SSU6 project site. A Draft Environmental Impact Report (DEIR) was approved on May 11, 2001 and was available for public review and comment until August 27, 2001. A public hearing was held on July 18, 2001. The Fredricks Variation 2 (interchange) alternative was identified as the preferred alternative on November 19, 2001. The Project Report and Final EIR approval is anticipated in Fall 2002.

Construction is anticipated to begin in 2004 and end in 2007. Construction will be completed in three stages: Stage 1 (Mead Road to SR-78); Stage 2 (SR-78 to Hovley Road) and Stage 3 (Hovley Road to SR-86).

5.17.3.2 Salton Sea Solar Evaporation Pond Pilot Project (Project ID 2)

The proposed project consists of up to 12 shallow excavated ponds and associated equipment to study evaporation efficiency and salt concentration methods as part of the long-term plan for the restoration of the Salton Sea. The ponds are along the shore of the Salton Sea between Niland Marina Road and Bombay Beach, about 10 miles north of the SSU6 project site.

A Negative Declaration was certified in February 3, 2001 indicating that this project would not contribute to cumulative environmental impacts in the area. The project has been in full operation since May 1, 2001 and will operate until May 2002. The ponds will serve as a source of data collection regarding the efficient removal of salt from the seawater to provide a long-term solution to the rising salinity in the Sea.

5.17.3.3 Imperial Irrigation District Water Conservation and Transfer Project/Habitat Conservation Plan (Project ID 3)

The IID and U.S. Bureau of Reclamation released a Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) in January 2002 for the IID Water Conservation and Transfer Project and Draft Habitat Conservation Plan (IID and U.S. Bureau of Reclamation 2002). The proposed project involves implementation by IID of a long-term (75 years) water conservation program to conserve up to 300 thousand acre-feet per year (KAFY) of Colorado River water and the transfer of this conserved water by IID to the San Diego County Water Authority (SDCWA), Coachella Valley Water District (CVWD), and/or Metropolitan Water District of Southern California (MWD). The proposed project also includes a Habitat Conservation Plan (HCP) to address federal and state endangered species requirements under the Federal Endangered Species Act (FESA) and the California Endangered Species Act (CESA). IID's long-term water conservation program would be implemented within IID's water service area in Imperial County, California, which consist of approximately 500,000 acres. Under the proposed project, water conservation would be undertaken in the IID water service area using one or more of the following measures:

- On-farm irrigation system improvements, including on-farm irrigation management techniques, which would be implements by landowners and tenants within IID's water service area.
- Improvements by IID to its water delivery system.
- Subject to certain contractual limitations set forth in the IID/SDCWA Transfer Agreement, fallowing measures to conserve water.

5.17.4 Summary of Cumulative Impacts and Conclusion

This section contains a summary of the cumulative impacts analysis that is presented for specific environmental disciplines (e.g., air, water, biology, etc.) in Sections 5.1 through 5.16.

The project area is designated for development of geothermal production and geothermal electrical power production in the County's Geothermal and Transmission Element. Additionally, the project area is zoned for agricultural uses but geothermal facilities are permitted and regulated pursuant to the Geothermal Overlay Zone (GOZ). The project is consistent with the requirements of the County's General Plan and zoning standards, which provide general and specific standards to avoid or substantially lessen potential project-level and cumulative impacts.

Furthermore, as described in Section 3, the project incorporates numerous design features which will avoid and reduce potential environmental impacts. Potentially significant impacts will be reduced to below a level of significance through implementation of the mitigation measures identified in Section 5.1 through 5.16. Consequently, the project's contribution to cumulative impacts are not cumulatively considerable or will be rendered less than cumulatively considerable through mitigation measures set forth herein.

Construction of the SSU6 Project is expected to occur between the last quarter of 2003 and the last quarter of 2005, with peak activity occurring in 2004. Most construction for the Brawley Bypass (ID 1) would not coincide with construction of the SSU6 Project, and the project is 12 to 15 miles away from the SSU6 Project. Construction-related impacts would be temporary because of the temporary nature of the construction period (approximately 20 months). Additionally, there are other regional and local transportation routes to the SSU6 site. Potential impacts from these projects would be localized and cumulative impacts would not be significant.

A Negative Declaration was issued for the Salton Sea Solar Evaporation Pond Pilot (ID 2) indicating that this project would not result in environmental impacts. The SSU6 Project would be approximately 10 miles away and any impacts would be less than significant. No cumulative impacts would occur.

The SSU6 Project would be located within the IID's water service area and thus, within the area of the proposed water transfer and HCP (ID 3). The SSU6 Project would convert 173 acres of agricultural lands (less than 0.0005 percent of available agricultural land in Imperial County) to industrial use and this additional conversion of agricultural land would not significantly contribute to the cumulative loss of agricultural lands. The SSU6 Project would reduce water usage compared to agricultural irrigation and would not contribute to cumulative impacts to water resources.

Construction activities associated with the IID project are anticipated to begin by the end of 2003 and be on-going. Although the SSU6 Project would be constructed concurrent with the some

construction activities of the proposed water transfer and HCP, construction-related impacts would be temporary and localized and would not result in significant cumulative impacts.

The SSU6 project will not contribute to growth-inducing impacts in the area for two reasons. First, the power generated from the SSU6 will be sold to the California power grid for distribution throughout the state. Second, the project would require 69 operational employees and this would not be considered growth inducing.

5.17.5 Mitigation Measures

Mitigation measures for cumulative impacts are not provided because significant cumulative impacts would not occur as a result of the proposed project.

5.17.6 References

Boyle, Mike. 2002. Federal Energy Regulatory Commission. Personal Communication with K. Ellis (URS Corporation).

Cabinilla, Richard. 2002. Imperial County Planning Department. Personal Communication with K. Ellis (URS Corporation).

California Energy Commission. 2002. Current, Expected and Approved Power Plant Licensing.

2002. CEC website: http://www.energy.ca.gov/sitingcases/index.html. January 3, 2002.

Curtis, John. 2002. Imperial Irrigation District, Water Department. Personal Communication with K. Ellis (URS Corporation).

Galvan, George. 2002. Westmorland and Calipatria Planning Department Consultant. Personal Communication with K. Ellis (URS Corporation).

IID and U.S. Bureau of Reclamation. 2002. IID Water Conservation and Transfer Project Draft Habitat Conservation Plan EIR/EIS. Prepared by CH2M Hill. January.

Kastoll, Linda. 2002. El Centro BLM Office, Realty Specialist. Personal Communication with K. Ellis (URS Corporation).

King, Carlton. 2002. Imperial Irrigation District, Power Department. Personal Communication with K. Ellis (URS Corporation).

Poiriez, Brad. 2002. Imperial County Air Pollution Control District. Personal Communication with K. Ellis (URS Corporation).

Russell, Ellen. 2002. US Department of Energy, Office of Fossil Energy. Personal Communication with K. Ellis (URS Corporation).

State of California, Office of Planning & Research. 2002. State Clearinghouse Documents.

OPR CEQA Query website: http://www.ceqanet.ca.gov. January 16, 2002.

Table 5.17-1
CUMULATIVE PROJECTS LIST

Project Number	Project Name - Lead Agency	Project Description	Status/Timing	Location
1	State Route 78/111 Expressway (Brawley Bypass)- Department of Parks and Recreation	The proposed action is to construct State Route 78/111 Brawley Bypass as a four-lane divided expressway.	DEIR approved May 11, 2001, and was available for public review and comment until August 27, 2001. The Fredricks Variation 2 (interchange) Alternative was identified as the preferred alternative on November 19, 2001. The Project Report and Final Environmental Document approval is anticipated in fall 2002. Construction is anticipated to begin in 2004 and end in 2007. Construction will be completed in three states. Stage 1 (Mead Road to SR-78); Stage 2 (SR-78 to Hovley Road); and Stage 3 (Hovley Road to SR-86).	State Route 86, northwest of the City of Brawley, to State Route 111, southeast of the City of Brawley, in Imperial County, California.
2	Solar Evaporation Pond Pilot Project- Salton Sea Authority	The proposed project consists of the construction of 12 shallow excavated ponds and associated equipment to study evaporation efficiency and salt concentration methods as part of the long-term plan for the restoration of the Salton Sea.	A Negative Declaration was available for public review until February 7, 2001.	Highway 111 and Niland Marina Road

Table 5.17-1 (continued)
CUMULATIVE PROJECTS LIST

Project Number	Project Name - Lead Agency	Project Description	Status/Timing	Location
3	Water Conservation and Transfer Project/Habitat Conservation Plan – Imperial Irrigation District	limplementation by IID of a long-term (75 years) water conservation program to conserve up to 300,000 KAFY of Colorado River water and the transfer of this conserved water by IID to the SDCWA, CVWD, and/or MWD. The proposed project also includes an HCP to address federal and state endangered species requirements under FESA and CESA. IID's long-term water conservation program would be implemented within IID's water service area in Imperial County, California, which consist of approximately 500,000 acres.	A Draft Environmental Impact Report/Environmental Impact Statement was completed in January 2002. Implementation is anticipated to begin before the end of 2002.	Within the six geographic subregions of IID's water service area in Imperial County, California.